

Claims

- [c1] A pool cover structure for a swimming pool, the pool cover structure comprising:
- a frame having a semispherical shape with a height-to-diameter ratio of at least 1:3, the frame being constructed of a plurality of plastic tube sections, the frame comprising at least first and second circular portions that are substantially concentric with each other and a peak section that is substantially concentric with the first and second circular portions and defines the uppermost extent of the frame, the first circular portion being a lowermost base of the frame and adapted for supporting the frame on a railing of the swimming pool, the frame further comprising a first series of supports that directly connect the second circular portion to the first circular portion so as to space the second circular portion above the first circular portion, the frame further comprising a second series of supports interconnecting the second circular portion with the peak section of the frame, the first series of supports being present in the frame in a greater number than the second series of supports, at least one of the first series of supports being removable from the frame; and

a cover supported by the frame so as to define a semi-spherical enclosed space, wherein removal of the at least one support of the first series of supports enables access to the enclosed space beneath the cover.

[c2] The pool cover structure according to claim 1, wherein the height-to-diameter ratio of the frame is about 1:3.5.

[c3] The pool cover structure according to claim 1, wherein the frame further comprises:
at least a third circular portion between the second circular portion and the peak section and substantially concentric with the first and second circular portions;
a third series of supports that directly connect the second circular portion to the third circular portion so as to space the third circular portion above the second circular portion; and
a third series of supports interconnecting the third circular portion with the peak section of the frame.

[c4] The pool cover structure according to claim 1, further comprising plastic fittings that interconnect all of the tube sections.

[c5] The pool cover structure according to claim 1, wherein the frame is mounted to the swimming pool.

[c6] The pool cover structure according to claim 5, wherein

the swimming pool is an aboveground circular swimming pool.

[c7] The pool cover structure according to claim 6, further comprising straps that attach the frame to the railing of the swimming pool.

[c8] A pool cover structure for an aboveground circular swimming pool, the pool cover structure comprising: a frame having a semispherical shape with a height-to-diameter ratio of about 1:3.5, the frame being constructed of a plurality of plastic radial tub sections and a plurality of plastic circumferential tube sections connected together with plastic fittings, the frame comprising at least first and second circular portions that are substantially concentric with each other and a peak section that is substantially concentric with the first and second circular portions and defines the uppermost extent of the frame, the first circular portion being a lowermost base of the frame and adapted for supporting the frame on a railing of the swimming pool, the frame further comprising a first series of supports that directly connect the second circular portion to the first circular portion so as to space the second circular portion above the first circular portion, the frame further comprising a second series of supports interconnecting the second circular portion with the peak section of the frame, the

first series of supports being present in the frame in a greater number than the second series of supports, at least two of the first series of supports and at least a section of the second circular portion being removable from the frame; and

a cover supported by the frame so as to define a semi-spherical enclosed space, wherein removal of the at least two supports of the first series of supports and the section of the second circular portion enables access to the enclosed space beneath the cover.

- [c9] The pool cover structure according to claim 8, wherein the frame further comprises:
- at least a third circular portion between the second circular portion and the peak section and substantially concentric with the first and second circular portions;
 - a third series of supports that directly connect the second circular portion to the third circular portion so as to space the third circular portion above the second circular portion; and
 - a third series of supports interconnecting the third circular portion with the peak section of the frame.

- [c10] The pool cover structure according to claim 8, wherein the frame is mounted to the swimming pool.

- [c11] The pool cover structure according to claim 10, further

comprising straps that attach the frame to the railing of the swimming pool.